CLAIMS

1. A culture method in producing a copolyester by a microorganism

which comprises controlling a specific substrate feed rate of an oil or fat to be used as a carbon source at a constant value throughout the whole culture period.

2. A culture method in producing a copolyester by a microorganism

which comprises applying a different specific substrate feed rate of an oil or fat used as a carbon source between a cell growth phase and a polyester accumulation phase in a culture and controlling the rate at a constant value during the respective phases.

3. The culture method according to Claim 1 or 2

which comprises controlling the composition of the produced copolyester by selecting the species and/or the control value for the specific substrate feed rate.

4. The culture method according to any one of Claims 1 to 3,

wherein the oil or fat used as a carbon source contains at least one oil or fat selected from the group consisting of soybean oil, corn oil, cottonseed oil, palm oil, palm kernel oil, coconut oil and peanut oil, and fractionated oils obtained by fractionating these oils.

5. The culture method according to any one of Claims 1 to 4,

wherein the oil or fat used as a carbon source contains lauric acid in the constituent fatty acids, and

the culture is carried out under the condition phosphorus being restricted.

6. The method according to any one of Claims 1 to 5, wherein the microorganism is selected from the group consisting of microorganisms belong to the genus Ralstonia, the genus Pseudomonas, the genus Aeromonas, the genus Alcaligenes and the genus Escherichia.

7. The culture method according to any one of Claims 1 to 6, wherein the microorganism is a transformed microorganism into which a polyester polymerase gene is incorporated.

8. The culture method according to any one of Claims 1 to 7, wherein the copolyester contains 3-hydroxyhexanoic acid unit.